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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,628	04/02/2004	David M. Rinehart	AD6991 USNA	2864
23906 7590 03/22/2007 E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128 4417 LANCASTER PIKE WILMINGTON, DE 19805			EXAMINER LAUX, JESSICA L	
			ART UNIT 3635	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			03/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/817,628	RINEHART ET AL.	
	Examiner	Art Unit	
	Jessica Laux	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :03/02/06
02/22/06; 02/25/05; 07/21/04;.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-11, drawn to an exterior glazing element, classified in class 52, subclass 204.5.
- II. Claims 12-15, drawn to a process of installing two glazing units in a support structure, classified in class 52, subclass 741.1.
- III. Claims 16-20, drawn to a building having interior and exterior glazing elements, classified in class 52, subclass 204.593.

The inventions are distinct, each from the other because of the following reasons:

Inventions I & III and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)).

Inventions I & III and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case process can be used to make another and materially different product as evidenced by the varying embodiments disclosed, being different products capable of being made by the claimed process.

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Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Additionally if group I is elected an election of species requirement is as presented below.

This application contains claims drawn to the following disclosed, patentably distinct species:

Species I – the embodiment of figure 1

Species II - the embodiment of figure 2

Species I – the embodiment of figure 3

Species I – the embodiment of figure 4

Species I – the embodiment of figure 5

Species I – the embodiment of figure 6

Species I – the embodiment of figure 7.

The species are independent or distinct because they each require a separate and distinct structure have different structural relationships that are a burden to search as each embodiment requires a separate search query. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument

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that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

During a telephone conversation with Mr. Mark Kuller on March 5, 2007 a provisional election was made with traverse to prosecute the invention of Group III, claims 16-20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-15 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16-20 recite the limitations "the laminate" or "laminate(s) throughout the claims. There is insufficient antecedent basis for this limitation in the claim.

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Claim 16 recites the limitation "the first clip and the second clip". There is insufficient antecedent basis for this limitation in the claim.

Claims 18 and 20 recite the limitation "the mullion and the pressure plate". There is insufficient antecedent basis for this limitation in the claim.

Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear whether the retaining channel formed by the mullion and pressure plate is the same retaining channel as claimed in claim 16 or a separate structure. If it is indeed the same channel, examiner suggest changing the claim language to be similar to for example "the building of claim 16 wherein the retaining channel is formed by a mullion and a pressure plate".

Claim Objections

Claim 16 is objected to because of the following informalities:

Line 5 recites "comprise a and an attachment"

The last line recites "the first clip and the second clip interlocked"; examiner suggests changing to "are interlocked".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art in view of DeBlock et al (20030066256).

Regarding claims 16-17: Applicant discloses in the specification, at least on page 1, lines 16-27 and page 5, lines 11-20, that it is known to have a building comprising a first glazing element for exterior pressure plate glazing, a second glazing element for exterior pressure plate glazing, and a support structure, where the support structure is a mullion and pressure plate, wherein:

- a) the first glazing element and the second glazing element each comprise an attachment means for holding the laminate in, or attaching the laminate to a support structure;

- c) the laminates each comprise at least one layer of glass bonded directly to the interlayer on at least one glass surface;

- e) in each of the glazing elements the attachment means is a clip useful for aligning and holding the laminate in a retaining channel of the support structure (wherein the support structure is a mullion and pressure plate assembly), wherein the clip comprises at least one mechanical interlocking extension useful for restricting rotational and/or transverse movement of the laminate within the channel or movement of the laminate out of the channel.

Applicant does not disclose a pressure plate and mullion structure with a laminate panel having the thermoplastic interlayer bond directly to the attachment means of a clip and the clip being retained to the structure.

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DeBlock et al. (figure 7) discloses a window assembly comprising a first and second laminate structure where the interlayer (20 and 92) is a thermoplastic and it extends beyond the glazing element to attach to the attachment means (12 and 14, which are clips); and

e) in each of the glazing elements the attachment means is a clip useful for aligning and holding the laminate to the support structure (wherein the support structure is a mullion and pressure plate assembly), wherein the clip comprises at least one mechanical interlocking extension (the part that contacts the glazing element) useful for restricting rotational and/or transverse movement of the laminate; and

f) the first clip and the second clip interlocked to the support structure (figure 7).

It would have been obvious to one of ordinary skill in the art to modify the common and well known structure of a mullion and pressure plate to have the clip, and glazing elements adhered thereto, as disclosed by DeBlock attached to the channel of the structure assembly as such a structure would provide a stronger more secure connection of the glazing elements to the mullion and pressure plate assembly, by virtue of the interlayer bonding.

Regarding claim 18: The building of claim 16 wherein each of the first and second glazing element are contacted by gaskets (DeBlock, figure 7, elements 38 b&d) which assist in holding the glazing elements the support structure.

Regarding claim 19: The building of claim 18 wherein the first laminate and the second laminate are glass/interlayer/glass laminates (figure 7, elements 28 and 86).

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Regarding claim 20: The building of claim 19 further comprising a fastener, where applicant discloses admitted prior art of a mullion and pressure plate assembly that has a fastener, that holds the pressure plate and mullion together, and that can be tightened or loosened to apply more or less pressure to the gaskets holding the glazing element.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica Laux whose telephone number is 571-272-8228. The examiner can normally be reached on Monday thru Friday, 6:30am to 2:30pm (est).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on 571-272-6842. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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03/08/2007


JEANETTE E. CHAPMAN
PRIMARY EXAMINER
GROUP 34003635